

Dr. John E. Watkins, Section Editor

Department of Plant Pathology

University of Nebraska

Lincoln, Nebraska 68583

(190)

ALFALFA (*Medicago sativa* '26 cultivars<sup>1</sup>)Common leaf spot; *Pseudopeziza medicaginis*Stemphylium leaf spot; *Stemphylium botryosum*

T. W. Massee, R. R. Romanko and C. E. Osgood, USDA-ARS, Kimberly, Idaho 83341 University of Idaho, Caldwell, Idaho 83605, and SDS Biotech Corp., Boise, Idaho 83709, respectively.

EVALUATION OF BRAVO FOR DISEASE CONTROL IN ALFALFA CULTIVARS GROWN FOR HAY, 1983: The alfalfa cultivars, having Turkish and/or Flemish parentage and which were adapted to the northern and central U.S., were established under irrigated culture in late spring, 1981, on a productive Portneuf silt loam. Plots were randomized block with 4 replications, each split for Bravo, and were 5 x 25 ft. Following the establishment year, Bravo was applied to the stubble prior to regrowth in an attempt to control inoculum. The tractor-mounted spray rig, which had a 25-ft boom (T-jet 6503 nozzles, 40 psi, 35 gpm) was driven across only the Bravo-treated plots in 1982, but across all plots in 1983 to eliminate the wheel compaction variable.

Compaction may have reduced the 1982 treated yields, as wheel tracks were evident after the cuttings grew. After this parameter was eliminated in 1983, Bravo treated plots had significantly better yields as compared to untreated plots. Somewhat greater percent leafspot control was achieved by the Bravo treatment in 1983. All 26 cultivars responded similarly to Bravo, i.e. there was not a statistically significant cultivar x Bravo interaction.

Treatment and rate/A	1982					1983				
	Yield (T/A)			Disease ratings <sup>1</sup>		Yield (T/A)			Disease rating <sup>2</sup>	
	Jun 22	Aug 2	Sep 22	Aug 2	Sep 22	Jun 17	Aug 4	Oct 6	Aug 4	Oct 6
Untreated . . . . .	4.63 a	2.65 a	1.98 a	1.18 a	1.20 a	2.98 a	2.52 a	1.23 a	1.17 a	1.43 a
Bravo 500 3 pt . . . . .	4.51 b	2.69 b	2.00 a	1.02 b	1.13 a	3.07 a	2.60 b	1.34 b	0.62 b	1.09 b

<sup>1</sup> Disease rating 1982: 0 = <1% infection; 1 = 2-5%; 1.5 = >5%.<sup>2</sup> Disease rating 1983: 0 = no infection on lower leaves; 1 = 5-10%; 1.5 = 10-20%.<sup>3</sup> Numbers within a column when followed by the same letter are not significantly different according to the Duncan's New Multiple Range Test (P=0.05).